

5-1967

# The history and development of port facilities of the Chesapeake and Ohio Railway Company, Newport News, Virginia

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## Recommended Citation

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THE HISTORY AND DEVELOPMENT OF PORT FACILITIES  
OF THE CHESAPEAKE AND OHIO RAILWAY COMPANY,  
NEWPORT NEWS, VIRGINIA

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A Thesis  
Presented to  
the Faculty of the Department of Political Science  
The University of Richmond

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts in Political Science

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by  
Ronald Winborne Odom

May 1, 1967

## CHAPTER I

### PURPOSE OF STUDY

Many changes have taken place since the first steam locomotive of the Chesapeake and Ohio Railway's Peninsula Division sailed into port on the deck of a four-mastered schooner in the Autumn of 1881. Inhabitants of that fishing village, which was later to become the Port of Newport News, witnessed the steam locomotive being unloaded on the tracks of a then partially completed seven hundred foot cargo pier jutting out into the James River where Pier Two stands today.

From these simple beginnings has grown the present, sprawling Port of Newport News with its many warehouses, piers, and facilities for the unloading of coal, ore, tobacco and the countless other items of cargo that make the seaborne-landborne transition at this deepwater terminal.

The purpose of this study is to present a survey of the history and development of port facilities of the Chesapeake and Ohio Railroad at Newport News, Virginia. This survey will cover the embryonic existence of the Port during the Colonial Period and trace its slow but progressive development up to and including the present day.

This writer's interest for such an undertaking was kindled by his association with the Chesapeake and Ohio Railroad for the past five summers.

## CHAPTER II

### THE GENESIS OF THE PORT OF NEWPORT NEWS

Because of the lack of early records, it is difficult for this writer to present specific statements concerning the early beginnings of the Port.

Daniel Gookin, who was patented land at Newport News shortly after he arrived at the Virginia Colony in the Flying Harte in November 1621, had brought with him forty head of cattle for each of which he was to receive a hundred weight in tobacco.<sup>1</sup> It is assumed that some of this livestock was unloaded at Newport News and, therefore, may be said to be one of the first imports while the tobacco Gookin was paid was exported from this area.<sup>2</sup>

Cotton also served as an early export, for Captain John Smith stated that at "Newport Newes the cotton trees in a yeere grew as thick as one's arm and so high as a man."<sup>3</sup>

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1. Harold S. Sniffen, "The Port and Shipping of Newport News," in Newport News' 325 Years, ed. Alexander C. Brown (Newport News, Virginia, 1946), p. 296.

2. Ibid. 3. Ibid.

A Dutch ship master named Peter de Vries wrote in 1633 of stopping at "Newport-Snuw" and discovering a spring where all ships navigating the James River might stop to fill their casks.<sup>4</sup> During the embryonic stage of the harbor, water was to be among the first commodities to be taken aboard ship.

These early beginnings of trade described were of small significance.

The advantages of such a point as the Peninsula could not be appreciated until the passing of time and the advent of industry. Newport News Point witnessed much shipping passing its shores enroute to or from such localities as Hampton, Norfolk, Jamestown, and later to Richmond.<sup>5</sup>

With the advent of steam vessels, the 1816 Powhatan was perhaps the first steamboat to travel the waters of the James enroute to Richmond on scheduled service.<sup>6</sup> In 1817 the Norfolk became the second steamer passing the Newport News Point enroute to Richmond.<sup>7</sup>

According to Harold S. Sniffen, Assistant Director of the Mariners' Museum in Newport News, "apparently no particular shipment of goods from Newport News took place

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4. Ibid.      5. Ibid.

6. Ibid.      7. Ibid.

until the middle of the Nineteenth Century."<sup>8</sup> The farmers of this area enjoyed great prosperity and shipped their produce consisting of corn, oats, wheat, sweet potatoes, and Irish potatoes by schooner to Norfolk and Richmond and as far north as Baltimore during the years preceding the Civil War.<sup>9</sup> Means of loading such produce aboard a vessel apparently involved dumping it in bulk into the holds of the ship with the net result that it frequently spoiled. To prevent such a loss, produce was later packed in barrels.<sup>10</sup> With the advent of steamships to Hampton Roads to carry produce farther north in less time, and by employing packing, the farmers were enabled to export more perishable goods such as tomatoes, green vegetables and fruits. Before the building of piers, or piers of sufficient size, it was necessary to lighter this produce into the stream where the Richmond-Norfolk steamer stopped to take it to Norfolk and load it aboard the New York steamships.<sup>11</sup> It is of interest to the reader to note that George Benjamin West recorded that passengers at Newport News who wished to take the boat to Norfolk or Richmond "placed a handkerchief on a stick" to signal

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8. Ibid.      9. Ibid.

10. Ibid.      11. Ibid.

the steamer to stop and take on travelers.<sup>12</sup>

The exportation of farm produce was abruptly halted as a result of the War Between the States, bringing shipping of a different nature to the Peninsula. Normal agricultural activity was slowly resumed during the years between 1865 and 1880.<sup>13</sup>

According to an article found in Brown's collection entitled "Vignettes of Yesterday: A Letter to the Pioneers," by George B. West, some significance was attached to the land adjoining the property of Parker West. The article presents the following account:

Washington Burk who owned the next farm lived in Richmond and rented the farm of 155 acres to Meerian and Gill, both of whom remained and contained store keeping. The dwelling stood on the bluff fronting Pier seven, it was partially burned in 1882 and rebuilt and now occupied by British Vice Consul, Captain Jas Haughton as an office. It was used as headquarters by commanding officers of the fort. This fort extended in a semi-circle from Pier two to a short distance below number two Elevator.

The old wharf standing in 1861 was at the upper side of Pier four became useless and a merchandise wharf was erected where in now Pier six and also a very large wharf between Piers three and four to store coal for their ships. The bulkhead was at least an acre, and the weight of the coal sunk it two or three feet in the center. The store stood near the

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12. Ibid.      13. Ibid.



power house of number one Elevator, and was used as a Sulter's store and hotel, it having been enlarged, it was burnt before the end of the war.

West continues the article by describing the naval warfare which was conducted in the waters of the Port:

The iron-clad Virginia sank the Cumberland in deep water in front of Pier six, and the Congress was burned aground nearly opposite Dawson City.<sup>14</sup> The Florida, a privateer taken from a neutral port, was supposed to have been scuttled to prevent her being returned to the Confederate Government, was sunk in the channel in front of Pier two.<sup>15</sup>

There was little need for piers until the Chesapeake and Ohio Railway Company extended its line to the Peninsula in the early Eighties. Records show however, some piers having been constructed prior to that time.<sup>16</sup> Sniffen's article states:

The first pier was probably built in 1851 by Robert B. Bennett, who commenced his duties as the first postmaster in Newport News during that year. Where Pier Four now stands, he built a dock, about 750 feet long near which was probably located his combined general store and post office. A second pier was built in 1860

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14. Serves as a storage yard for incoming coal.

15. George B. West, "Vignettes of Yesterday: A Letter to the Pioneers," in Newport News! 325 Years, ed. Alexander C. Brown (Newport News, Virginia, 1946), p. 276.

16. Sniffen, loc. cit.

by Parker West near the present Eighteenth Street. A store house was also constructed at that time, later used by the Federal forces as a commissary. The diary of General Benjamin F. Butler infers that Bennett's Wharf was still standing after West's Pier was built, for on May 27, 1861, Butler stated that Newport News "has two good, commodious wharves, to which steamers of any draft of water may come up at all stages of the tide."<sup>17</sup>

To this writer's knowledge, there were no other piers constructed from 1861 to 1880 and there are no records to indicate whether the Bennett or West structures were still standing when the Chesapeake and Ohio began constructing its line to the Peninsula in 1880.<sup>18</sup>

The next phase in the historical development of the Port came about as a result of Collis P. Huntington's idea becoming a reality.

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17. Ibid.

18. Ibid., p. 297.

### CHAPTER III

#### NEWPORT NEWS AND THE ADVENT OF THE CHESAPEAKE AND OHIO RAILROAD

Although the founding and development of any locality is dependent upon the geographical influence which nature has provided, the commercial history of Newport News did not commence until 1880. In that year, with through railroad connections extending westward from Richmond, plans were formulated by the Chesapeake and Ohio Railway Company for extending its line eastward from Richmond to the sea.

To enable the company to extend eastward, the Virginia General Assembly, in 1879, passed an act allowing a track to be laid to the Atlantic Coast.<sup>19</sup> Such legislative action was required in an era of deepening draft of ocean steamers and increasing use of coal both for bunkers and cargo. Collis P. Huntington was authorized by the Newport News Board of Public Works to acquire land and water frontage at the Point.<sup>20</sup>

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19. Charles W. Turner, Chessie's Road (Richmond, Virginia: Garrett and Massie, Incorporated, 1956), p. 112.

20. Ibid.

For the extension to deep water on the Chesapeake Bay, several routes were proposed including one to Gloucester Point.<sup>21</sup> The actual decision had been deferred for several years due to financial stringency, but Huntington finally decided upon the mouth of the James River at Newport News.<sup>22</sup>

In deciding upon an eastern terminus, Huntington outlined the advantages of this natural harbor in an annual report of September 1880:

This is a point so designed and adapted by nature that it will require comparatively little at the hands of man to fit it for our purposes. The roadstead, well known to all maritime circles, is large enough to float the ocean commerce of the world; it is easily approached in all winds and weather without pilot or tow; it is never troubled by ice and there is enough depth of water to float any ship that sails the seas; and at the same time it is so sheltered that vessels can lie there in perfect safety at all times of the year.<sup>23</sup>

Collis P. Huntington, as eastern representative and general fiscal agent in New York for California partners in the Central Pacific Railroad, had had a leading part

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21. E. O. Smith, "Collis P. Huntington: Empire Builder," in Newport News' 325 Years, ed. Alexander C. Brown (Newport News, 1946), p. 200.

22. Ibid.

23. Annie Lash Jester, Newport News, Virginia, 1607-1960 (Newport News, Virginia: The City of Newport News, 1961), pp. 109-110.

in building and completing in 1869 the first transcontinental railroad.<sup>24</sup> In the same year, with New York associates, he acquired the Chesapeake and Ohio Railway Company which had been recently chartered in Virginia and West Virginia as a consolidation of the charter privileges of several incompleated smaller lines.<sup>25</sup> Purchase negotiations included an agreement to extend the line through the mountains of Virginia thereby providing rail service to traffic centers along the Ohio River, to reconstruct the older parts of the line devastated by the Civil War, and to promote the extension of the Company's connections.<sup>26</sup>

It was under the latter phase of the purchase agreement that the seventy-five mile extension to Newport News was begun in the latter part of 1880. Prior to that time the only coaling port located in Virginia was found to be below the James River Falls at Richmond where coal from hoppers was carried across the wharf in wheelbarrows to be loaded on shipboard.<sup>27</sup>

To facilitate extension of the road and as a measure for control of land speculation along the route, the Old Dominion Land Company was organized in October 1880, the

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24. Smith, loc. cit.      25. Ibid.

26. Ibid.      27. Ibid.

charter of which authorized not only the purchase of land along the route where titles were available, but also the building of a city on the line.<sup>28</sup> Although the Chesapeake and Ohio Railway Company had organized its own department for building the peninsula division, independent companies were formed to build the new city and to establish the business necessary.<sup>29</sup> Several Hampton citizens organized the Newport News Land Company, but shortly afterwards the Huntington interests established the Old Dominion Company with its subsidiary, The Newport News Shipbuilding and Dry Dock Company.<sup>30</sup> Pennsylvania architect Theodore Genesey, who served as city planner, proposed construction of houses, a bank, a city hall and a union chapel to offer attractions to prospective settlers.<sup>31</sup>

A map of Newport News dated April 29, 1881, showing numbered streets beginning from the tip of Newport News Point, named avenues, lot and block numbers.<sup>32</sup> This map was filed in the county records.<sup>33</sup>

By 1890 the population of the Newport News Point had increased to 4,449, and by 1896 the community contained well over 9,000 inhabitants.<sup>34</sup>

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28. Ibid.      29. Turner, op. cit., p. 113.

30. Ibid.      31. Ibid.

32. Smith, loc. cit.      33. Ibid.

34. A. M. Hamilton, "The Growth and Development of the City Government," in Newport News' 325 Years, ed. Alexander C. Brown (Newport News, 1946), p. 7.

Water was most essential for a developing community, especially for one growing as rapidly as the Peninsula. As a result, on August 12, 1889, the Newport News Light and Water Company obtained a charter.<sup>35</sup> Prior to this time, every home and business concern was dependent upon water drawn from springs and wells.

To expedite construction, the railroad extension was built from both ends toward the middle section.<sup>36</sup> With part of the line on temporary construction track, newspapers reported "the snort of the iron horse" from Newport News first heard at Williamsburg in October 1881.<sup>37</sup> A two-fold purpose had been accomplished. First: that terminal facilities at Newport News were equipped for receiving water shipments as heavy as a railway locomotive and, second: that Huntington had executed his promise to public-spirited citizens of Virginia for the accommodation of troops and visitors attending the centennial celebration of the surrender of Cornwallis at Yorktown on October 19, 1781.<sup>38</sup> This was a gala day in the "fishing village" of Newport News, fifteen years before the town was to be incorporated.<sup>39</sup>

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35. Ibid., p. 8.      36. Smith, loc. cit.

37. Ibid.      38. Ibid.

39. Charles W. Baines, "Vignettes of Yesterday: Our First Passenger Train," in Newport News' 325 Years, ed. Alexander C. Brown (Newport News, 1946), p. 267

Although two finger piers were in existence prior to the arrival of the Chesapeake and Ohio Railway, major construction work for terminal wharves and piers had commenced in December 1880 with the arrival of a construction team from Old Point Comfort.<sup>40</sup> Two wharves were to be built, extending twenty-five feet into the water, with necessary coal tipples and chutes for coaling purposes and adequate facilities for handling merchandise.<sup>41</sup>

Other short track extensions and spur lines were added on the Peninsula for additional company business with an extension to Old Point Comfort via Hampton being completed in 1882.<sup>42</sup>

Construction activity on the main line continued until its completion on May 1, 1882.<sup>43</sup> The Company proposed the line to be connected for scheduled through southbound traffic to coal and merchandise piers at Newport News.<sup>44</sup> By 1883, a second merchandise pier and an elevator with a 1,500,000 bushel capacity for export grain were being added to the terminal's facilities.<sup>45</sup>

The Chesapeake and Ohio Railway Company signed agreements with the Old Dominion Steamship Line and the

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40. Smith, loc. cit.

41. Turner, op. cit., p. 112.

42. Ibid., p. 113.

43. Smith, loc. cit.

44. Ibid.

45. Ibid.



Union Steamship Line for the purpose of providing a trade route to and from Europe for the railway company. The steamship Kanawha was ordered into service to carry on coastwise shipping.<sup>46</sup>

By 1887, the company felt that its business volume warranted the purchase of a controlling interest in the Chesapeake and Ohio Steamship Line, of which Sir Christopher Furness was president.<sup>47</sup> This company provided some six vessels for the use of the railroad between Newport News and English ports.<sup>48</sup> Within two years time, Collis P. Huntington reported that:

The advantage of the deep water terminus at Newport News is already felt, in a greater degree even than had been expected at so early a day, especially in the influence on the coal traffic of the road. . . . The superior quality of our steam-coals for marine use, and the convenience and accessibility of Newport News as a coaling station for the largest steamships, are rapidly creating a business which is destined to assume a very large proportion in the near future.<sup>49</sup>

Pier construction for the railroad company was assigned to I. Eugene White on December 8, 1880.<sup>50</sup> As a result of the assignment, three superb piers were erected.

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46. Turner, loc. cit.      47. Ibid.

48. Ibid.      49. Ibid.

50. Sniffen, loc. cit.

Before 1882, Piers One and Two had been completed and apparently the lower one was designated as "One" while the upper pier was to be called number "Two," contrary to the present system of numbering the Port's facilities.<sup>51</sup>

A chronicle on the early days of the Chesapeake and Ohio Railway contained that, "on April 18, 1882, one side of coal pier No. Three was completed and ready for business."<sup>52</sup> The article also stated that the first ship to load coal was the schooner William H. Kenzel, followed by the Company's Kanawha, a smaller collier.<sup>53</sup>

The Wedge, the first newspaper to be published in Newport News, mentioned the piers in its first local issue on April 21, 1883.<sup>54</sup> It described a "pier or freight dock" 132 feet wide and 700 feet in length, a coal pier fifty feet in width and 800 feet in length and an 800 foot long dock for the Old Dominion Steamship Company.<sup>55</sup>

In 1883, to meet the need for storing coal, the railroad company constructed on the waterfront what was then called the "coal-pocket" at a cost of \$75,000.<sup>56</sup> The railway's freight yards were not large nor did the company possess much rolling stock. The wooden storage

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51. Ibid.      52. Ibid.

53. Ibid.      54. Ibid.

55. Ibid.      56. Ibid.

platform or "coal-pocket" was a failure, for it sank several feet under the weight of the coal and therefore, the structure had to be abandoned. A steady increase in coal business soon demanded the erection of a second coal pier which was completed in 1888.<sup>57</sup>

Pier One, sometimes referred to as the "passenger pier," along with the old wooden station building with its ornate tower, were constructed in 1892, as well as an additional freight pier.<sup>58</sup> Prior to this time, the eastern route of passenger trains terminated at Twenty-eighth Street and then later extended to what is now Pier Six.<sup>59</sup> One of the public services established during the 1890's was the horse car which "ran" from the passenger station to the Newport News Shipyard. The "passenger pier" was lengthened in 1907.<sup>60</sup>

The Chesapeake and Ohio Railway Company also maintained several vessels which included passenger boats, tugs, car floats and lighters.

The Norfolk Daily Dispatch made public the following announcement on Tuesday, October 18, 1881: "The Ariel

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57. Clarence W. Newman, "Railway's Extension to Deep Water Created Port City," in Newport News' 325 Years, ed. Alexander C. Brown (Newport News, 1946), p. 59.

58. Sniffen, loc. cit.      59. Ibid.

60. Ibid.

makes connection from here tomorrow with the Newport News Railroad to Yorktown, the road being completed."<sup>61</sup> The crossing of the Ariel marked the beginning of passenger service from Norfolk to the Newport News Terminal.<sup>62</sup>

As a result of the eastern extension to the Atlantic Ocean being completed, tugs were required to assist large vessels around the docks and to move lighters and carfloats to and from Norfolk.

The first tugboat to be purchased by the company was the Grace Meade, bought from a firm in Richmond.<sup>63</sup> The service of this vessel terminated shortly, for on January 9, 1886, it sank at its pier in Newport News.<sup>64</sup>

At present, four tugboats serve the company in and around the terminal waters.

The Chesapeake and Ohio Railway extended not only its passenger service, but also its freight line to Norfolk, Virginia and has maintained the necessary floating equipment to carry on this service. Presently the company possesses four car floats of various sizes, the largest of which are capable of handling twenty-eight to thirty cars.<sup>65</sup> These carfloats are dispatched from Newport News

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61. Ibid.

62. Ibid.

63. Ibid.

64. Ibid., p. 301.

65. Ibid.

to the Naval Operating Base, to Sewells Point for connection with the Norfolk-Portsmouth Belt Line, and to the Chesapeake and Ohio's Norfolk yard.<sup>66</sup>

Barge service was begun in Newport News about 1885 for the purpose of transporting coal.<sup>67</sup> During the year 1900 over four hundred such barges were loaded at the piers.<sup>68</sup> This figure increased during the next ten years to approximately one thousand barges being loaded in a year's time.<sup>69</sup> But since that time business involving barge service has slackened. The principal barge companies operating to Newport News were: the Seaboard Transportation Company of Boston; the Staples Coal Company of Fall River; and the Scully Towing and Transportation Line of New York.<sup>70</sup>

At the time of this writing, seven covered barges of approximately four hundred tons capacity are owned by the company for the shifting of cargo to wharves in the Hampton Roads area or alongside vessels anchored in the harbor or at the piers.<sup>71</sup>

A pier, large enough to accomodate a train, was constructed by Edwin R. Vaughn and Company in 1892 for the purpose of providing storage space for lumber that was

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66. Ibid.      67. Ibid., p. 302.

68. Ibid.      69. Ibid., p. 299.

70. Ibid.      71. Ibid., p. 302.

to be exported.<sup>72</sup> This pier was located where the railroad's present car floats dock between Piers Six and Eight.<sup>73</sup> In 1913, the Vaughn and Company Pier was acquired by the Waterfront Lumber Company which sold its property to the Chesapeake and Ohio Railway Company and moved to its present location on Jefferson Avenue in Newport News.<sup>74</sup>

An article in the 1898 Annual Report of the Old Dominion Land Company stated that:

Attention is called to the fact a merchandise pier has been constructed by this company at a cost of \$29,000. This pier is located at the foot of Twenty-fifth Street; it is 900 feet long, extends to deep water and is equipped with electric hoisting apparatus for unloading ships' cargo.<sup>75</sup>

This report was referring to Pier A, the center of much activity at the turn of the century and also a docking place for countless vessels during the First World War.<sup>76</sup> Today the pier stands a desolate structure, reminiscent of many waterfront tales.

Numerous residents of the Peninsula would probably remember the passenger and mail boat Oneida, used in service between Newport News and Smithfield from the time the pier

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72. Ibid., p. 297.

73. Ibid.

74. Ibid.

75. Ibid.

76. News item in the Daily Press, February 25, 1941.

was built until 1928 when the James River Bridge was completed.<sup>77</sup>

The pier was also used as a clearing house for merchandise during the summer months. At this time, Pier A could be seen loaded with watermelons, pears, apples, egg-crates, and various kinds of country produce brought here from Isle of Wight, Surry, and Nansemond counties.<sup>78</sup>

Pier A was destroyed by fire in 1936.<sup>79</sup>

With the building of Pier A and the erection of another open freight pier, one finds at the turn of the century and tabulated in the 1900 Old Dominion Land Company Report the following piers: "One Passenger Pier, Two Pleasure Piers, Four Covered Piers, Eight Open Freight Piers, and Three coaling piers."<sup>80</sup>

Other changes have occurred on the waterfront from 1900 to the present day. The number of piers owned by the railroad have been reduced, but the size of the facilities and the volume of shipments which can be handled have been greatly increased. None of the three coal piers operating at the beginning of the Twentieth Century are in existence today.

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77. Ibid.

78. Ibid.

79. Ibid.

80. Sniffen, loc. cit.

In keeping with these indications of expanding traffic requirements, a contemporary account in the Newport News Commercial dated 1892 read: "The Chesapeake and Ohio Railroad is now letting contracts for a double track into this town, as they cannot handle their immense traffic over a single track."<sup>81</sup>

To strengthen its overseas services, the railroad established its own steamship line in 1893.<sup>82</sup> The line was to be called the Chesapeake and Ohio Steamship Company, Ltd. and was to provide regular scheduled sailings between Newport News, Liverpool and London.<sup>83</sup> By expanding overseas, the line contributed materially to the building up of the export and import traffic of the railroad and added greatly to the prestige of Newport News as a port.

Another venture in water transportation was undertaken by the railroad in 1899 when the Coastwise Steamship Company was formed to carry coal from Newport News to northeastern ports.<sup>84</sup>

Prior to the beginning of the Twentieth Century, the Chesapeake and Ohio Railway Company was engaged in the expansion and revision of facilities and the improvement

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81. Newman, p. 60.      82. Ibid.

83. Ibid.      84. Ibid.



of its shipping connections in an effort to meet the needs of increasing traffic. Officials stated the port's potential in a report in 1900 that the terminal facilities at Newport News "consisting of a passenger pier, four merchandise and three coal piers, two grain elevators and sixty-five miles of yard track are amply adequate . . ."<sup>85</sup> As a result, the two main objectives of the terminal, the loading of coal on vessels and the interchange of merchandise traffic between rail and ship, had been successfully carried out.

As stated previously, the first grain elevator was constructed in 1883 at the head of Pier Five. This facility, designated as Elevator "A", boasted a 1,750,000 bushel capacity of grain and the ability to load 300,000 bushels of grain daily.<sup>86</sup> The loading process consisted of carrying the grain by means of conveyor belts from both sides of the elevator onto the pier and chutes guided the flow into the holds of the vessels.<sup>87</sup>

Elevator "B", built in 1899 at the head of Pier Eight, was of smaller capacity (one million bushels), but contained a more rapid loading device.<sup>88</sup>

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85. Ibid.

86. Sniffen, op. cit., p. 304.

87. Ibid.

88. Ibid.

Both of these facilities were constructed of wood and were eventually destroyed by fire. Elevator "A" burned in September 1915 while Elevator "B" was destroyed on November 8, 1934.<sup>89</sup>

Latter improvements at the terminal included construction of additional tracks at the Fifty-eighth Street receiving yard in 1955, bringing the number of tracks there to a total of seventy-eight.<sup>90</sup>

In 1962, the company installed an ultramodern pneumatic grain-handling installation on the northside of Pier Four, attracting soybean and meal traffic for the port.<sup>91</sup>

This writer feels that the activities of the port during wartime merit discussion. Therefore, this portion of the chapter is devoted to this subject.

The terminal served as a vital port of embarkation during the Spanish-American War.<sup>92</sup> Such activity taxed the struggling government of a municipality then

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89. Ibid.

90. News item in the Times-Herald, November 2, 1955.

91. News item in the Daily Press, December 23, 1962.

92. Newman, loc. cit.

only two years old, but the city came through this period of extra responsibilities with greater strength.<sup>93</sup>

During both World Wars the activities of the port underwent a vast expansion.<sup>94</sup> The government recognized the railroad's ability to transport troops and supplies to the Atlantic Coast for departure to Europe. Newport News served as the headquarters of the Hampton Roads Port of Embarkation during World I and World II.<sup>95</sup>

World War I activities included some 276,000 troops embarked at Newport News and millions of tons of military supplies were shipped to Europe.<sup>96</sup>

When the United States entered World War II, the Army established to the north of Newport News and directly connected with the main line of the Chesapeake and Ohio by spur tracks, Camp Patrick Henry for the assembling of troops and the Oyster Point Storage Depot for containerizing ammunition.<sup>97</sup> Prisoners of war routed through Hampton Roads were handled by the Newport News Terminal.<sup>98</sup>

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93. Hamilton, op. cit., p. 11.

94. Newman, loc. cit.      95. Ibid.

96. Ibid., p. 61.      97. Ibid.

98. Ibid.

A total of 772,133 troops and other personnel were embarked, 915,116 soldiers were debarked through the port and outbound cargo totaled 3,108,000 tons while import cargo totaled 118,000 tons.<sup>99</sup>

Port activity during the Korean War consisted mainly of the exportation of war materials while the transportation of troops took place at West Coast ports of embarkation.

At present, one finds the port engaged in the same activity, that of exporting supplies to Vietnam.

Pier X was constructed by the Army Transportation Corps at the beginning of World War II.<sup>1</sup> Located between piers Nine and Fourteen, the pier was especially designed for loading explosives by way of tracks carrying two railway cars abreast out either side, so ships moored against the pier were able to take ammunition directly from the cars.<sup>2</sup>

In 1946, the Army declared the pier surplus, and in June 1947, the long-term lease on the land was transferred to the Navy.<sup>3</sup> After the conclusion of World War II, the Department of Agriculture shipped thousands of

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99. Ibid.

1. News item in Times-Herald, December 22, 1954.

2. Ibid.      3. Ibid.

cattle and horses to Europe under various relief programs.<sup>4</sup>  
At present, the pier serves as a mooring place for construction barges.

The Newport News Terminal of the Chesapeake and Ohio Railroad now consists of nine piers and four general yard areas. Namely, these areas are the Fifty-eighth Street receiving yard or "58 Street Hump", the Thirty-fourth Street Junction, Dawson City and the Coal Bin area where Diesel locomotives are serviced.<sup>5</sup> The 1,050 acre tract that comprises the terminal begins at the Chesapeake and Ohio's Hampton Roads Transfer Station just below Hilton Village in Newport News.<sup>6</sup> At that point, the two main lines broaden out to the east to form the various receiving yards.

In addition to the piers aforementioned, Pier Three was originally built as a coal pier in 1882 and reconstructed as a low-level open pier in 1914.<sup>7</sup> A double-deck merchandise pier, to be designated as Pier Four, was erected in 1892.<sup>8</sup> Pier Five, a merchandise pier,

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4. Ibid.

5. Alexander C. Brown, "Typical C&O Switching Engine Performs Many Vital Duties," Daily Press, July 29, 1956, p. 1-D.

6. Ibid.

7. Newman, op. cit., p. 59.

8. Ibid.

was constructed in 1883 and rebuilt after destruction by fire in 1897.<sup>9</sup> Another merchandise pier, named Pier Six, was erected in 1882 and rebuilt after it was destroyed by fire in 1897 while merchandise Pier Eight, constructed in 1899, was destroyed by fire in December 1944.<sup>10</sup> This pier was rebuilt in seventy-five days.<sup>11</sup>

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9. Ibid.

10. Ibid.

11. Ibid.

## CHAPTER IV

### COAL FACILITIES OF THE TERMINAL

The first coal operations of the eastern terminus began in 1881.<sup>12</sup> In that year, a total of 575,000 tons were loaded aboard vessels.<sup>13</sup>

Coal transported to the Port of Newport News has always been chiefly obtained from the mines of West Virginia. The Chesapeake and Ohio Railway Company has not acted as an agency for the sale and distribution of coal except in its early days when the company operated the Chesapeake and Ohio Railway Coal Company.<sup>14</sup> That business was managed locally by various coal companies which owned or leased mines or in some other way controlled the coal supply.<sup>15</sup> The Chesapeake and Ohio Railroad served in the capacity as carrier. A majority of the coal shipments brought to Newport News were for further shipment either coastwise or abroad, although there was considerable local consumption.<sup>16</sup>

The original coal agency at Newport News later became an independent concern called the Chesapeake and

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12. Sniffen, loc. cit.      13. Ibid.

14. Ibid.      15. Ibid.

16. Ibid.

Ohio Coal Agency Company.<sup>17</sup> Other coal companies, established later, were the Berwind White Coal Company, C. H. Sprague and Son Company, Kentenia Coal Company, New River Coal and Coke Company, West Virginia Coal Company, White Oake Coal Company, and the Wittenburg Coal Company.<sup>18</sup>

In 1914, a high-level coal pier was constructed to meet the increasing exportation of coal to foreign countries. This electrically operated all steel dumping pier, to be designated as Pier Nine, was erected at a cost of \$1,630,000 and located to the south of merchandise Pier Eight.<sup>19</sup>

Pier Fifteen, a low-level coal pier, was constructed at the very tip of the shipping channel of the James River in 1931.<sup>20</sup> In 1933, the company invested \$2,250,000 to provide concrete reinforcement and an electrically operated elevator for the pier.<sup>21</sup> As a result of this construction, operation from the southside of the pier was not hampered.

On October 5, 1955, Company President Walter J. Tuohy announced planned expansion of Pier Fifteen to

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17. Ibid. 18. Ibid.

19. Turner, op. cit., p. 167.

20. Newman, loc. cit. 21. Turner, pp. 210-211.



allow coal loading on the northside of the pier.<sup>22</sup>

Tuohy stated:

Undertaking of this sizable project now by the C&O demonstrates our confidence in a continued heavy movement of export coal. There is no wait-and-see in our faith in the future of bituminous coal and in the continued strength of the Nation's economy.<sup>23</sup>

The proposed expansion consisted of a dumping tower and related pier, a conveyor, tracks and yard facilities. Before this undertaking, Pier Fifteen contained one loading tower on the southside where hopper cars were lifted up and overturned to a loading chute through which the coal ran down into the vessel's holds.<sup>24</sup> The new tower on the northside would have a telescopic chute fed from a hopper through which the coal would be carried by a conveyor from the land end of the pier.<sup>25</sup> At this point, the coal cars were to be emptied by being upended in a rotary dumper. Yard facilities were to include added track for two hundred fifty loaded cars, sufficient cargo for the largest ship being loaded at that time. Tracks to accommodate those cars when emptied were also constructed.<sup>26</sup>

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22. News item in the Times-Herald, October 5, 1955.

23. Ibid.      24. Ibid.

25. Ibid.      26. Ibid.

Tuohy later announced that the construction at Pier Fifteen was due for completion in twelve months and operation of the pier's southside would not be hampered.<sup>27</sup>

The pier presently operates at a maximum capacity of two thousand net tons per hour on the southside and three thousand five hundred net tons per hour on the northside, with an average loading capacity of fifteen hundred net tons per hour on each side.<sup>28</sup>

Being one of the most modern piers of its type on the Atlantic Seaboard, the substructure of Pier Fifteen is composed of concrete one thousand feet in length and eighty-nine feet in width.<sup>29</sup> There is a stationary steel loading tower located five hundred fifty feet from the bulkhead.<sup>30</sup> Winches at opposite ends of the pier move the vessel lengthwise along the pier, as necessary, to load the various holds. This pier, with its companion facility, Pier Fourteen, has superior facilities particularly designed for dumping prepared coal, which is accomplished with a minimum of degradation.

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27. News item in the Times-Herald, November 4, 1955.

28. Newport News Coal Pier 15, Chesapeake and Ohio Railway Fact Sheet (Newport News, 1957), p. 1.

29. Ibid.      30. Ibid.

Other equipment includes facilities for sprinkling the coal on request, weather conditions permitting, as well as fresh water, telephone service, oil bunkering facilities, and ample lighting.<sup>31</sup>

This writer would like to include a description of the facility's operation. Loaded hopper cars move by gravity from ample storage yards, pass over a scale and are then pushed up an incline to a dumper. The weight of each hopper car is recorded by the scale office to ensure that the loading tower is properly notified when the required tonnage for each hold of the vessel has been loaded.

The northside of Pier Fifteen was placed in operation during January, 1957.<sup>32</sup> This side of the pier is designed primarily for handling prepared coal with maximum breakage.<sup>33</sup> Loaded coal cars empty their contents into hoppers by means of a rotary car dumper. From these hoppers, two seventy-two inch wide belt feeders, traveling at a very slow rate, transfer the coal onto the main sixty inch dock conveyor belt, which without transfer, conveys the coal to a one hundred fifty ton storage hopper on the loading tower.<sup>34</sup> At this point,

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31. Ibid.

32. Ibid., p. 2.

33. Ibid.

34. Ibid.

a specifically designed lowering device places itself into the hopper, opening a gate at the bottom of the storage hopper permitting the coal to flow through a pan into the telescopic chute and the cowl of the trimming machine. A gate on the cowl retains the coal and assumes that the pan and chute are kept filled with coal while in operation.<sup>35</sup> A device on the storage hopper senses the height of coal in the hopper, it falls below a predetermined level and the gate on the cowl of the trimming machine closes and remains closed until the supply of coal in the storage hopper is replenished.<sup>36</sup> Thus, the system may be kept filled with coal and excessive drops avoided. The entire system is operated by means of an adjustable speed which is controlled along with the main conveyor speed ranging from two hundred to six hundred feet per minute.<sup>37</sup> Therefore, it is possible to select a speed to handle the various grades of coal with minimum loss of form.

On April 1, 1947, it was announced by Robert J. Bowman, President of the Chesapeake and Ohio Railroad, that the company proposed to construct a low-level coal pier at Newport News at an estimated cost of \$5,000,000,

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35. Ibid.      36. Ibid.

37. Ibid.

including necessary supporting yard facilities.<sup>38</sup> The announcement also stated that the pier would be similiar to and located along the west side of Pier Fifteen.<sup>39</sup> Company officials estimated that it would require nine months to assemble steel for the pier and once construction had begun, approximately fifteen months would be required for completion.<sup>40</sup>

The addition of such a pier, along with supporting facilities, would increase the railroad's equipment for loading coal aboard vessels at the Newport News Terminal 33 per cent.<sup>41</sup>

In the same year, the company anticipated in the next three to five years, approximately two million tons of coal would be offered at the Newport News piers each month, or five hundred thousand tons more per month than could be handled.<sup>42</sup> By constructing an additional pier, it was hoped that one coal pier might serve as a reserve which would maintain loading at near capacity while other facilities were under repair.

On April 18, 1947, the project was given federal approval by the office of the housing expediter

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38. News item in the Daily Press, April 1, 1947.

39. Ibid.      40. Ibid.

41. Ibid.      42. Ibid.

in Richmond.<sup>43</sup>

The cost of construction was now estimated to be approximately \$6,500,000; \$1,500,000 above the original estimate made by the company in April.<sup>44</sup> Construction contracts were awarded to Tidewater Construction Company of Norfolk, Norfolk Dredging Company, The Link Belt Company of Philadelphia, and the Alliance Machine Company of Alliance, Ohio.<sup>45</sup>

In June 1948, railroad officials declared that Pier Fourteen, depending upon prompt receipt of materials and equipment, should become operant by January 1, 1949.<sup>46</sup>

Once again company spokesmen were required to revise the estimated cost of construction in August 1948 by \$3,209,200, making the project cost in excess of \$8,000,000.<sup>47</sup> Such an increase in cost was due mainly to the river bottom shifting in the proposed project area therefore, causing an extension of the pier into the James River to compensate for deep-draft vessels.<sup>48</sup>

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43. News item in the Times-Herald, April 18, 1947.

44. News item in the Daily Press, April 18, 1947.

45. Ibid.

46. News item in the Times-Herald, June 24, 1948.

47. News item in the Times-Herald, August 19, 1948.

48. Ibid.

Construction of the facility was not completed in time to commence operating by January 1, 1949, due to unavoidable delays resulting from material shortages and adverse weather.<sup>49</sup> The last phase of the project to be completed was the receiving yard to the pier. Twenty tracks were laid to accommodate loaded coal cars, while two eight-track yards were constructed on either side of the storage yard to place emptied cars once the coal had been released on the pier.<sup>50</sup>

Once all construction had been completed, Pier Fourteen would serve as a dual pier just as Pier Fifteen. Each side of the pier would consist of a scale house, a car-thawing plant, tandem dumpers, two mobile loading towers on tracks, and two conveyor belts to carry coal from the dumpers.<sup>51</sup>

After construction was delayed for three different periods, January, March and May 1949, Pier Fourteen began operating in September of that year.<sup>52</sup>

This writer would like to include some description

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49. News item in the Daily Press, April 3, 1949.

50. Ibid.      51. Ibid.

52. News item in the Times-Herald, August 13, 1949.

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52. News item in the Times-Herald, August 13, 1949.



as to the operation of the pier's facilities.

While Pier Fourteen was not the first of its kind to provide a conveyor belt system, it is presently the largest installation of this type on the South Atlantic Coast.<sup>53</sup> The Baltimore and Ohio Railroad employs a similar belt pier at Curtis Bay, Maryland while the Western Maryland Railroad constructed one at Baltimore.<sup>54</sup>

Pier Fourteen rests upon a flat concrete structure 1,078 feet in length and approximately eighty feet wide and ten feet above mean high water at its surface.<sup>55</sup> The pier is equipped with four traveling towers, two on each side of the pier, that stand approximately eighty feet, and four conveyor belts which have a maximum loading capacity of six thousand net tons per hour.<sup>56</sup> At the far inshore end of the pier are located four rotary dumpers arranged in pairs in tandem on two separate parallel tracks. Behind the pier are constructed two inclined tracks leading from the dumpers to a scale house and the pier's receiving yards.

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53. Newport News Coal Pier 14, Chesapeake and Ohio Railway Fact Sheet (Newport News, 1949), p. 1.

54. Ibid.      55. Ibid.

56. Ibid.

Actual operation of the pier would involve a loaded coal car moving by gravity from the receiving yard, crossing the four hundred ton capacity track scales where the car's weight is recorded by a clerk in the scale office. Still impelled by gravity, the car passes through a coal thawing plant to the foot of one of the two inclines leading to the dumper. At this point, a mechanical device, known to railroad employees as a "barney", seizes the rear of the car and moves it upon the inclined track into the dumper. A period of sixty seconds is required for the contents of the car to be emptied into a hopper beneath the dumper. Placed directly under the hopper are located three reciprocating feeder belts which pass the coal into a longitudinal collector belt.<sup>57</sup> This mechanism in turn distributes the coal evenly to one of the pier's four main belts which stretch the entire length of the pier.<sup>58</sup>

As the coal moves along the main belt, a special tripper mechanism transfers the bituminous material to an incline conveyor which lifts the coal to the top of one of two traveling towers.<sup>59</sup> Here, the coal falls

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57. Ibid.      58. Ibid.

59. Ibid.

through a spiral chute onto another belt that travels along the tower's loading boom. At this point, the coal is dropped through a telescopic chute located at the end of the boom into the hold of the vessel secured along the side of the pier.<sup>60</sup> Two of the four telescopic chutes on the pier are equipped with high speed mechanical trimmers which cast the bituminous material twenty-five to thirty feet into the vessel's holds.<sup>61</sup> The remaining chutes are provided with slow speed trimmers that dump prepared coal into the vessel without reducing the size of the coal by breakage.

The extreme flexibility of Pier Fourteen permits it greater operating advantages and economy benefits as compared with piers Nine and Fifteen. The flow of coal from car to vessel is a continuous operation due to the belt system. The large rotary dumpers permit the emptying of a 105 ton capacity coal car within a sixty second period.

In constructing the pier, engineers employed 110,042 linear feet of reinforced concrete piling ranging in size from 18 to 24 square inches, 70,157 cubic yards of concrete and 950,000 pounds of reinforcing steel.<sup>62</sup>

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60. Ibid.      61. Ibid.

62. Ibid., p. 2.

A number of the piling were driven to a depth of 110 feet.<sup>63</sup> For the construction of bulkheads and fenders, a special type of wood, Green Heart timber imported from British Guiana, was used. A total of 103,920 feet of this lumber was required in constructing the pier.<sup>64</sup>

Operation of Pier Fourteen requires the services of a forty-five man staff for one eight-hour shift; the same number as required at Pier Fifteen, but ten less than the force need at Pier Nine. Personnel include twenty car riders or breakmen, two dumper operators, four tower operators, two pier dispatchers, two weighmasters, two weigh clerks, a chief weighmaster, two trimmer foremen, two line catchers to aid in berthing vessels, one belt attendant, one deck foreman, one barney yard clerk, two checkers and four laborers.<sup>65</sup>

Figures released by the Chesapeake and Ohio Railroad in July 1950 were somewhat of a disappointment to company officials, as the year was considerably less active than had been anticipated.<sup>66</sup>

According to company figures, only 2,343,807 tons were actually dumped at the low-level facility

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63. Ibid.      64. Ibid.

65. Ibid.

66. News item in the Times-Herald, July 11, 1950.

since it began operation in July 1949.<sup>67</sup> Pier Fourteen was, nevertheless, the terminal's busiest coal pier during that time. Its companion structure, Pier Fifteen, handled 1,748,243 tons during the same period while Pier Nine, oldest of the three coal piers, loaded only 687,773 tons.<sup>68</sup> Pier Nine remained inactive from November 1949 to July 1950. During this pause of the pier's operation, there was speculative talk of retiring the structure and converting the pier into an ore dock. By taking such action, an overworked Pier Two would be eased. There was also the possibility of rebuilding Pier Nine to serve as a merchandise facility.<sup>69</sup>

The operation of Pier Fourteen was hampered from the very beginning by coal miners' strikes, three-day work weeks and a general slump in shipping. In the early 1950s, the pier was handling approximately 75 per cent of the port's coal-dumping business.<sup>70</sup> Theoretically and under optimum conditions, the pier could load a total of 52,560,000 tons within a year's time, working every hour.<sup>71</sup>

In October 1961, C. S. Savage, Superintendent of

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67. Ibid.      68. Ibid.

69. Ibid.      70. Ibid.

71. Ibid.

the Newport News Terminal, announced that Pier Fourteen would be renovated to increase the facility's dumping capacity by 50 per cent.<sup>72</sup> Instead of a maximum rate of six thousand net tons per hour, construction improvements would provide a maximum rate of nine thousand net tons per hour.<sup>73</sup> Proposed construction involved elevating the loading towers by ten feet in order for them to clear main deck hatches of newer bulk carriers. Also, a newly designed conveyor belt was to be added allowing increased tonnage in less time.<sup>74</sup>

Completed during the middle of 1962, the \$2,200,000 improvement project now allowed the pier to accommodate supercolliers, enabling a forty-five thousand ton vessel to be loaded in 8½ hours.<sup>75</sup> Increased pressures from the competition being offered by the Norfolk and Western Railroad's facilities in Norfolk required the actual renovation of Pier Fourteen.

To supplement the use of fifty, seventy, and eighty-five ton hopper cars, the company employed one hundred ton capacity coal cars on April 1, 1967.<sup>76</sup>

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72. News item in the Daily Press, September 19, 1961.

73. Ibid.      74. Ibid.

75. News item in the Daily Press, December 23, 1962.

76. News item in the Times-Herald, February 10, 1967.

The possibility of erecting a third facility for unloading coal was made known by the Chesapeake and Ohio Railroad in February 1957.<sup>77</sup> Plans called for the facility to be designated as Pier Twelve. Although the pier would not replace the government facility, Pier X, company officials stated that the new structure would be erected approximately five hundred feet upstream from Pier Fourteen, at an estimated cost of \$15,000,000.<sup>78</sup> The proposed pier's dimensions included a length of 1,254 feet, a width of approximately 120 feet, and was to extend 217 feet into the channel.<sup>79</sup> Sketches of the District Corps of Engineers showed the pier to be of a belt-conveyor type, with an overhead traveling tower. The facility would be erected upon concrete piles extending from a fill on the shore side.<sup>80</sup>

Proposals for such construction were based upon predictions of Walter J. Tuohy, Chesapeake and Ohio Railway President. According to Tuohy, exports of approximately one million tons were expected in the near future.<sup>81</sup> Therefore, in order that the Chesapeake

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77. News item in the Times-Herald, February 20, 1957.

78. Ibid.      79. Ibid.

80. Ibid.      81. Ibid.

and Ohio Railroad might maintain its leadership within the export market, such a third coal pier was actually necessary.

As a result of the reduced demand for export coal by European countries within the next year, the company announced that construction on Pier Twelve would be suspended as of March 1958.<sup>82</sup>

January 23, 1967 marked a historic day for the coal facilities at the Newport News Terminal. Prior to this time, no vessel afloat had ever required the maximum operational capacity of the terminal's coal facilities. Nudged into berth by a quartet of tugboats, the Cetra Columbia, the world's largest coal vessel afloat, capped the first leg of her maiden voyage by docking at Pier Fourteen.<sup>83</sup> Only 55,000 tons of coal were loaded aboard the vessel due to a forty foot channel depth preventing the French vessel from achieving her maximum capacity of 87,000 tons.<sup>84</sup> Therefore, a loading of twenty thousand tons was scheduled at the Norfolk and Western Railroad's coal facilities at Norfolk, Virginia.<sup>85</sup>

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82. News item in the Times-Herald, March 18, 1958.

83. News item in the Daily Press, January 23, 1967.

84. Ibid.      85. Ibid.



## CHAPTER V

### ORE FACILITIES OF THE TERMINAL

Originally constructed as a high-level coal pier in 1914, Pier Nine served in that capacity until it was abandoned in 1950. The high-level pier was the first of its type, in which the unloading of a coal car consisted of mechanically overturning the hopper. The process of unloading coal at the earlier facilities involved placing the car at the top of the pier and releasing the hoppers. The contents of the car then flowed into manually manipulated chutes which were directed toward the various holds of the vessel.

Prior to the completion of Pier Nine as an ore facility in 1957, the handling of ore was provided for by two cranes at Pier Two. This pier was rebuilt in 1914 as an open-level facility approximately six hundred feet in length, sixty-three feet in width and constructed of a wooden deck supported by wooden piling.<sup>86</sup> The pier's cranes were erected at a construction cost of \$219,465 and were readied for operation on October 13, 1940.<sup>87</sup> Since Pier Two also served in the capacity as

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86. Newman, loc. cit.

87. Pier Two, Chesapeake and Ohio Railway Fact Sheet (Newport News, 1950), p. 1.

an open-level merchandise pier, only steel girders supporting the crane runway were included in the construction of the pier.<sup>88</sup>

The cranes were designed for both handling ore and lifting heavy cargo. A hook suspended from a pulley near the end of the boom is used in cargo handling operations. The cranes revolve on rollers and the booms may be raised until nearly vertical. Each crane is capable of handling a thirty ton load at a sixty foot radius and coupled together, with an equalizer, the cranes can handle a maximum load of fifty-seven tons.<sup>89</sup>

When unloading ore, the booms remain horizontal. The crane operator's cab is stationary and the bucket travels along the boom on a rope trolley.<sup>90</sup> The ore is carried, by the bucket, to the receiving hopper car beneath the crane. A gate in the receiving hopper is opened until the desired amount of ore passes into the weigh larry hopper. The weigh larry is then spotted over the car to be loaded and at that point, the ore is dropped into the car.<sup>91</sup> There is only one receiving hopper on each tower and the crane places it on the side

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88. Ibid.

89. Ibid.

90. Ibid.

91. Ibid.

of the tower adjacent to the vessel being unloaded.<sup>92</sup>

In addition, Pier Two serves as a weight checker for overloaded ore cars passing through the facilities at Pier Nine.

In February, 1955, Tuohy announced that construction of a \$8,307,500 ore pier would commence at the site of abandoned Pier Nine in March of that year.<sup>93</sup> Proposed construction included a pier which would unload ore and bulk materials at the rate of a ton a second, rapid enough to empty a ten thousand ton cargo vessel in three hours. This time element would provide a loading operation approximately eight times that of the ore facilities at Pier Two.<sup>94</sup> Company officials, at the time of the announcement, anticipated placing the Newport News Terminal in competition with the East Coast's two largest ore ports, Baltimore and Philadelphia.<sup>95</sup>

President Tuohy justified the basis for such a plan by stating that ore imports to the United States would increase greatly from development of the Labrador iron ore mines and by those mines in South America

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92. Ibid.

93. News item in the Daily Press, February 9, 1955.

94. Ibid.      95. Ibid.

and Africa.<sup>96</sup> Shipments of manganese, chrome, barytes, kyanite and bauxite were also expected to increase. As a result of increased import traffic, the company estimated that an additional \$4,600,000 in railroad revenues would be produced a year.<sup>97</sup>

The proposed ore facility's dimensions included a length of 711 feet and 82 feet in width.<sup>98</sup> The pier would hold three unloading cranes, each capable of handling fifteen tons of bulk material every forty-five seconds. A belt would carry the ore to two six hundred ton capacity elevated storage bins under which railroad cars were to move. A Diesel locomotive would then shove a continuous line of empty hopper cars beneath the bins allowing four cars to be loaded simultaneously.<sup>99</sup>

Plans for construction were based on part by a report released by company engineers who studied pier construction in Europe during the summer of 1954.<sup>1</sup>

Figures released by the Chesapeake and Ohio Railroad in 1955 showed that in October of the preceding

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96. Ibid.      97. Ibid.

98. Ore Pier Nine, Chesapeake and Ohio Railway Fact Sheet (Newport News, 1957), p. 1.

99. Ibid.

1. Don McClure, "First Arrival: African Rainbow," Tracks, XLIII (January-February, 1958), p. 4.

year, a record loading of twenty thousand tons in forty-one working hours was set by the thirty ton industrial cranes with clamshell buckets at Pier Two, when the ore carrier, American Hawaiian, discharged Labrador iron ore.<sup>2</sup> At such a rate, Newport News ore facilities were seen to be about competitive with the port at Baltimore. Imports of ore showed an increase of 17 per cent during the first three-quarters of 1954 compared with the same period in 1953, records showing 296,242 tons to 333,291 tons being unloaded.<sup>3</sup>

In 1953 the company announced it gained an increase of 82 per cent in ore imports over 1952, from 242,178 tons to 432,140 tons unloaded.<sup>4</sup>

Between the arrival of the first ship from the iron ore mines of Labrador in September and the closing of the mines because of freezing temperatures in November, iron ore was being unloaded at the port at the rate of approximately eighty thousand tons per month in 1953.<sup>5</sup>

The Chesapeake and Ohio Railroad Company claimed two advantages as a result of constructing the pier upon the site of the abandoned coal pier. First, the cost of the proposed pier would be 1.5 million dollars less

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2. News item in the Daily Press, February 9, 1955.

3. Ibid.      4. Ibid.

5. Ibid.

due to the available site thereby eliminating dredging costs, and second, the railroad would be able to ship ore west in hopper cars that were formerly returning empty from the coal piers at the terminal.<sup>6</sup>

In January, 1955, a plan was organized in Congress which would possibly provide a Government manganese ore depot to serve Virginia.<sup>7</sup> Such a plan was viewed by railroad officials as a timely companion to prospective development of Newport News ore facilities. With a top-level Chesapeake and Ohio Railway proposal ready to be presented before company directors for approval, any promise of additional ore traffic through the port would be regarded as a factor in speeding the development of the multimillion dollar pier.

The plan to promote legislation for a manganese depot received support from Virginia Congressmen, Harrison and Abbitt, on January 27, 1955.<sup>8</sup> The bill was drafted after the Virginia Representatives conferred with Representatives Mills, Democrat from Arkansas, and J. Carson Adkerson, president of the American Manganese.

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6. Ibid.

7. News item in the Daily Press, January 27, 1955.

8. Ibid.

Producers Association.<sup>9</sup> At that time, Congressman Abbitt stated his support for the bill because "it is apparent the present Administration is not going to assist low grade producers in the East."<sup>10</sup> Harrison and Abbitt had contended for several years that General Services Administration's policies "discriminated" against Virginia. They claimed that the Government bought large quantities of low grade manganese ore at Government depots in Arizona, Montana, and New Mexico while refusing to provide any convenient point for Virginia deliveries.<sup>11</sup>

The bill required that the General Services Administration, which is charged with buying and stockpiling strategic material, establish a manganese depot to serve Virginia and other Southern Appalachian states.<sup>12</sup> The proposed legislation also provided a new receiving point to serve mines in the Ozarks.<sup>13</sup>

Under present Government purchase programs, ore containing 40 per cent or more of manganese, can be sold to the General Services Administration in carload lots

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9. Ibid.      10. Ibid.

11. Ibid.      12. Ibid.

13. Ibid.

at any railroad siding. Ore containing lower content is required to be delivered to a Government depot.<sup>14</sup>

The Virginia depot, to be established near Riverville, in Amherst County, was authorized to purchase up to fifteen million units of manganese by June 30, 1963.<sup>15</sup> A unit is defined as 22.4 pounds of metallic manganese.<sup>16</sup>

As a further basis for supporting the bill, Representative Harrison stated that:

Although Government officials have admitted, in recent months, that Virginia is leading in shipments under the car-load lot purchase program for small producers of high-grade manganese, they have refused to recognize the clear justification for depot facilities in the East comparable to those under which the Government has been buying in the West.<sup>17</sup>

Construction contracts were awarded to three firms in March, 1955, to begin building the ore facility. Tidewater Construction of Norfolk was charged with such tasks as dredging, driving and filling sheet steel piling cells, and the construction of a flooring system, fenders and mooring devices.<sup>18</sup> The Wellman Engineering Corporation of Cleveland was assigned the construction of two

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14. Ibid.      15. Ibid.

16. Ibid.      17. Ibid.

18. News item in the Daily Press, March 18, 1955.



endless conveyor belts along the 710 foot pier, on-shore driving motors, a carloading house, storage bins, and scales for weighing the cargo that was to be placed into railway cars.<sup>19</sup> Finally, Demag A. G. of Duisburg, Germany was to fabricate three bridge-type traveling cranes which would have a capacity to unload bulk materials at the rate of 3,600 tons per hour.<sup>20</sup> From the cranes on the pier, the ore would be carried by conveyor belts to the storage bins.

Actual construction on the pier commenced May 27, 1955, when Tidewater Construction Company began laying sheet steel cells upon piling.<sup>21</sup> This company remained at the site during the latter part of March, 1956, demolishing 65 per cent of the length of abandoned Pier Nine which was to be replaced by the ore facility.<sup>22</sup> Pilings were removed and decking replace, while two temporary railway tracks were laid to the construction site, over which approximately one thousand tons of steel were to be brought.<sup>23</sup> A half-mile of the River Road

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19. Ibid.      20. Ibid.

21. News item in the Daily Press, May 27, 1955.

22. Ibid.      23. Ibid.

highway, which runs along the waterfront, was moved inland to detour the shoreside of the project.

The first consignment of structural steel arrived from Germany aboard the freighter, Bischofstein, on July 26, 1956.<sup>24</sup>

The total plan for construction was divided into three phases. The first, called for a solid fill encased in steel cells while the second phase would be the reconstruction of the original Pier Nine. Finally, the installation of an overhead track was required from the pier's deck across the highway, to the Chesapeake and Ohio yards.<sup>25</sup>

The company announced that the completion date for the pier would be June, 1957.<sup>26</sup> Preliminary plans for the facility called for its completion when Chesapeake and Ohio stockholders met in Newport News on April 25 of that year.<sup>27</sup> Delays in construction work were due to adverse weather conditions which prevented operations at the pier site and, in turn, delayed arrival of the heavy steel units fabricated in Germany. In

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24. News item in the Times-Herald, July 27, 1956.

25. News item in the Times-Herald, December 3, 1955.

26. News item in the Daily Press, March 8, 1957.

27. Ibid.

addition, two strikes by dock workers during the course of a contract dispute between shippers and the International Longshoremen's Association added to the delay.<sup>28</sup>

It appeared that the ore facility was as controversial in the early 1960s as its construction was in 1955.<sup>29</sup>

Emil Szaks, who developed much of the handling facilities of the Chesapeake and Ohio Railroad, wryly noted that several difficulties had developed in application of the modern processes built into the ore facility.<sup>30</sup> He also emphasized the fact that the pier remained as a highly satisfactory way of moving ore from modern bulk carriers to inland mills.

Construction of the pier was controversial from the beginning since it was built according to German plans from American produced steel shipped to Europe for fabrication and then returned to Newport News as manufactured parts.<sup>31</sup>

According to Szaks, one innovation which went astray was relatively simple. Geiger counters would check the decreasing radiation from cobalt as more ore went into the hopper.<sup>32</sup> In practice the device was

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28. Ibid.

29. News item in the Daily Press, April 20, 1963.

30. Ibid.      31. Ibid.

32. Ibid.

difficult to use due to the varied types of ore received at the terminal.

Union jurisdiction made another objective impractical. One operator in the control tower on the inland side of the terminal could have operated the ore flow.<sup>33</sup> Instead, an employee was required to manipulate the button operating the conveyor belt to the weighing chute. A weighmaster must then determine the quantity of ore to be placed into each car. Finally, the electrician is required to manipulate another button opening the gate below the tower to allow ore to fall into the empty cars below.<sup>34</sup> Even the method of opening the gates changed. First, the gates would open all at once which could eventually incur extensive damage to rails beneath the rapidly loaded car. As a result of this possibility, the opening of the chute became a two part process.<sup>35</sup>

Szaks also stated that Pier Nine operated at approximately 80 per cent of its design capacity, almost double the service provided by conventional piers.<sup>36</sup> He credited this increased efficiency to a design which

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33. Ibid.      34. Ibid.

35. Ibid.      36. Ibid.

reduced the need for bridging or crane travel, simple controls and full view of the bucket by the operator and the quick interchange of the "trimming" type buckets.<sup>37</sup>

As a result of continuous delays, the June, 1957, operation date was not met. Actual unloading operations did not commence until August 15, 1957, when the British bulk carrier, La Hacienda, arrived in the Port of Hampton Roads to discharge a cargo of chrome ore from Bieru, East Africa.<sup>38</sup>

Irving Fuller, general manager of the Virginia Peninsula Association of Commerce, cited the new facility for "helping assure the Peninsula's sound and stable economy."<sup>39</sup>

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37. Ibid.

38. News item in the Times-Herald, August 14, 1957.

39. McClure, op. cit., p. 5.

## CHAPTER VI

### THE NEWPORT NEWS TERMINAL TODAY

This chapter will include a discussion of the merchandise pier presently under construction at the port. Also, this writer would like to present an evaluation of the proposed merger between the Chesapeake and Ohio and Norfolk and Western railroads as to what effect such a uniting might possibly have upon port activities of the Chesapeake and Ohio Railroad at Newport News.

At present, a \$7,500,000 merchandise pier is under construction which is especially designed for containerized cargo.<sup>40</sup> The pier will occupy the area formerly held by piers Three, Four, and Five, which have been demolished. Dimensions of the facility include a width of 543 feet and a length of 620 feet, comprising approximately eight acres of concrete foundation over water.<sup>41</sup> The transit shed, or housing, of the pier will provide a covered area of 270,000 square

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<sup>40</sup>. News item in the Times-Herald, October 21, 1966.

<sup>41</sup>. J. Frank Alspaugh, "The New Pier" (paper read at the Hampton Exchange Club, Hampton, Virginia, March 8, 1966).

feet or a little more than six acres.<sup>42</sup> The facility will also contain thirty-five foot aprons on either side of the pier, a thirty foot apron at the outboard end of the structure and a twenty foot wide apron on the in-shore side.<sup>43</sup> Such features will enable the pier to accommodate three large deep-draft, ocean-going vessels as opposed to the dual loading-unloading capacity of vessels docked at piers Six and Eight.

The merchandise pier, which is being constructed by B. F. Diamond Company of Georgia, is expected to be completed in October, 1967.<sup>44</sup>

The Virginia State Ports Authority filed a request with the State Budget Office which would provide \$20,700,000, from 1968 through 1974, for port improvement programs at Newport News.<sup>45</sup> Such a request will subsequently require the approval of the 1968 General Assembly.<sup>46</sup> The actual figure required is 40.14 million dollars; one-half paid by the state, the other portion financed by the locality. Two capital outlay projects

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42. Ibid.      43. Ibid.

44. News item in the Times-Herald, October 21, 1966.

45. News item in the Daily Press, March 18, 1967.

46. Ibid.

are anticipated: the present merchandise pier which is now under construction and a proposed 2,400 foot steel bulkhead and backfill, to be constructed within the next five years.<sup>47</sup>

The proposed merger of the Chesapeake and Ohio Railway and the Norfolk and Western Railroad could possibly create adverse conditions for port activities on the Peninsula. Comparatively speaking and by actual observation, the Norfolk and Western Railroad's port facilities at Norfolk are far superior to those of the Chesapeake and Ohio Railroad at Newport News. This writer has witnessed a lack of united effort on the part of the Peninsula's industrial leaders to express concern over the resulting loss of trade if the merger is granted by the Interstate Commerce Commission. The Peninsula Cities remained silent a few years ago when the Baltimore and Ohio merged with the Chesapeake and Ohio Railroad.<sup>48</sup>

At that time, local interests accepted fully private assurances of Chesapeake and Ohio Railway officials that port activity would not be reduced or inhibited

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<sup>47</sup>. News item in the Times-Herald, March 17, 1967.

<sup>48</sup>. Editorial in the Daily Press, February 19, 1967.



from future growth by virtue of the proposed merger. At the time that the plans of the new general merchandise pier were being proposed, many industrial leaders claimed that such a facility would increase port activity greatly.<sup>49</sup> The new pier will be more adequate than the three facilities it replaces as it will permit easier truck as well as railroad access. The fact remains, however, that the facility provides no increase in vessel berthing capacity at the waterfront. Furthermore, the pier will not provide the cranes necessary for the handling of modern containerized cargo.

At present, port activities of the Hampton Roads area are conducted on a competitive basis, Newport News receiving a majority of the coal exportation while ports at Norfolk are busily engaged in the more efficient handling of general cargo.

This writer contends that although such a merger would result in the largest rail system based upon mileage in the world, actual port activity on the Peninsula would subsequently decrease, therefore, hindering future industrial development on the Peninsula.

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49. Ibid.

## CHAPTER VII

### THE PORT AND ITS CONTRIBUTION TOWARD INDUSTRIAL DEVELOPMENT

In concluding this study, this writer feels it appropriate to include some discussion relating to the contribution by the port toward industry of the Peninsula as well as the state. Such a discussion is based upon figures compiled by the Bureau of Population and Economic Research of the University of Virginia, in cooperation with the Virginia State Ports Authority. Figures presented refer to the ports of Hampton Roads, Newport News and Norfolk, during the first nine months of 1966.

The value of inbound and outbound cargoes for this period reached \$390,833,322.<sup>50</sup> Approximately one out of every eleven adult Peninsula residents draws his livelihood from port activities while the entire Hampton Roads area ports employ 41,264 persons amounting to an annual payroll figure of approximately \$233,000,000.<sup>51</sup>

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50. News item in the Times-Herald, January 26, 1967.

51. News item in the Times-Herald, February 13, 1967.

The export trade of the Newport News Port, with two piers not in operation during this period, accounted for 7.2 million tons with a value of 300.2 million dollars.<sup>52</sup>

Imports for the period of nine months were valued at approximately \$95,500,000 for more than two million tons.<sup>53</sup>

Other export figures pertaining to the Port of Newport News included 6.6 million tons of coal, 92,395 tons of tobacco, wood and paper products accounted for 45,797 tons; textiles and fibers, 17,740 tons; metal products and machinery, 13,616 tons; food products, 12,284 tons; and synthetic rubber, 21,006 tons.<sup>54</sup>

The report indicated that foreign commerce for all the Old Dominion increased 3.8 per cent in the January to September period of 1966.<sup>55</sup>

The ports of Virginia combined ranked third in tonnage and seventh in value among the numerous East Coast and Gulf Coast ports.<sup>56</sup>

In an effort to promote the industrial products of Virginia, Governor Mills E. Godwin Jr. will direct

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52. Ibid.      53. Ibid.

54. Ibid.      55. Ibid.

56. Ibid.

a thirty-man trade mission to Europe in April, 1967. Among the products to be promoted abroad will be animal feeds, lumber products, machinery, hams, plastics, chemicals, seafoods, tobacco, coal, furniture, minerals and sportswear.<sup>57</sup> Other goals to be established are to locate possible foreign correspondents for Virginia banks, boost tourism, promote Hampton Roads port traffic and advance the twin possibilities of either licensing foreign firms to manufacture Virginia specialties or encouraging them to locate new facilities within the Commonwealth.<sup>58</sup>

According to Willits H. Bowditch, President of the Virginia State Chamber of Commerce, the chief aim of the trade mission was stated as follows:

The ports can be a tremendous help to the entire state and its industrial development, and I am convinced that our export trade and what we do internationally is going to be real important to us in the future.<sup>59</sup>

In conclusion, this writer would like to present the thoughts of Homer L. Ferguson, Chairman of the Board, Newport News Shipbuilding and Dry Dock Company from 1940

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57. News item in the Daily Press, February 10, 1967.

58. Ibid.

59. News item in the Times-Herald, March 25, 1967.

to 1953, concerning the port and the industrial future of the Peninsula. He remarked in 1946 that:

In the fifty years to come the atomic and air age will unroll itself and man will decide for himself whether he is to become a kamikaze pilot astride a jet-propelled missile or an intelligent, enlightened, social being. While the geographical limits of Newport News have been definitely defined, our future and true stature as a city must be measured in our capacity to grow up in culture, education, industry and in commerce. . . . This growth we must accomplish through easier means of communication to our city; through toll-free bridges across the James and York Rivers which open to us new hinterlands; through a tunnel to Norfolk and through the development of a great municipal airport equipped to compete in an air age. As individuals we must insure our future by continuing to fight the battles of cynicism and disillusionment which follow every great war. . . . Therein is the future for us all, future that will find Newport News still the best city in the world in which a man or woman could grow old. . . . I predict that in a few years we will have one community for government on this side of Hampton Roads and that long before fifty years are up, there will be a great Tidewater probably as Hampton Roads, comprising all the cities and towns in a radius of thirty miles. The development of a free port, of commerce, of ships and shipping facilities, naturally calls for such a solid community.<sup>60</sup>

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60. "The Next Fifty Years?," in Newport News' 325 Years, ed. Alexander C. Brown (Newport News, 1946), p. 347.

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On my honor, as a gentleman,  
I have not received any aid in writing  
this paper.

Ronald Winborne Odom  
Ronald Winborne Odom